

INCH-POUND

MIL-T-27/202A
20 April 1993
SUPERSEDING
MIL-T-27/202
25 November 1977

MILITARY SPECIFICATION SHEET

TRANSFORMER, POWER, STEP DOWN, TF5S03ZZ

A

Inactive for new design after
the date of this specification

This specification is approved for use by all Departments
and Agencies of the Department of Defense

The requirements for acquiring the product described herein shall
consist of this specification sheet and the issue of the following
specification listed in that issue of the Department of Defense
Index of Specifications and Standards (DODISS) specified in the
solicitation MIL-T-27

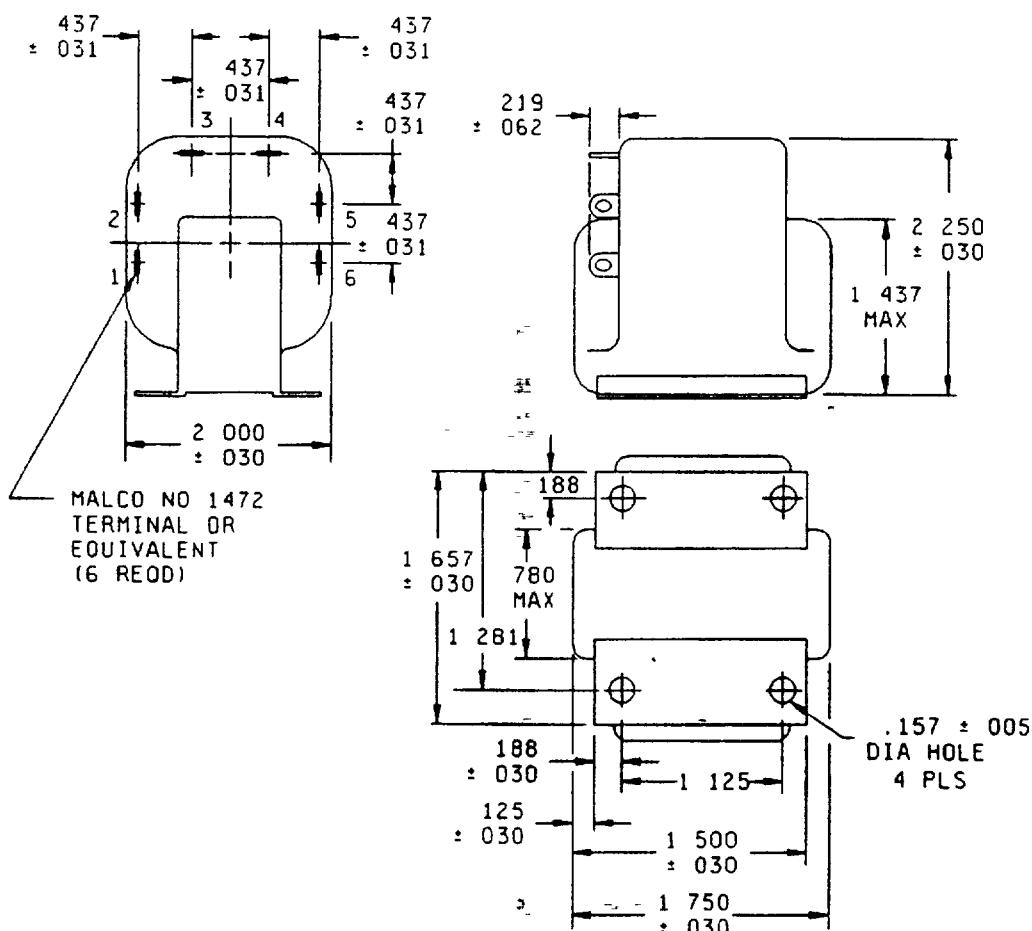
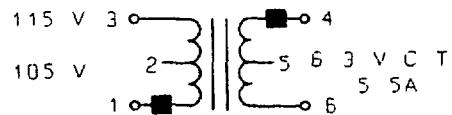


FIGURE 1 Dimensions and configurations

(A) denotes changes

AMSC N/A

DISTRIBUTION STATEMENT A Approved for public release, distribution is unlimited



WORKING VOLTAGE (PEAK)

$$(1 - 3) = 535 \text{ v}$$

$$(4 - 6) = 1070 \text{ v}$$

CIRCUIT DIAGRAM AND MARKING

Inches	mm	Inches	mm
.005	0.13	.780	19.81
.030	0.76	1.125	28.58
.031	0.79	1.281	32.54
.062	1.57	1.437	36.50
.125	3.18	1.500	38.10
.157	3.99	1.657	42.09
.188	4.78	1.750	44.45
.219	5.56	2.000	50.80
.437	11.10	2.250	57.15

NOTES

- 1 Dimensions are in inches
- 2 Metric equivalents are given for information only
- 3 Unless otherwise specified, tolerance on case dimensions is ± 0.16 inch (0.41 mm)
- 4 Marking shall be on the sides of the case

FIGURE 1 Dimensions and configurations - Continued

REQUIREMENTS (When numbers in parentheses, i.e., (1-2) are used, they indicate the winding and the extreme terminals of the windings)

Electrical ratings

Primary voltage (1-2-3) 105/115 volts, 380 Hz to 1,000 Hz

Primary current (1-3). 0.3 ampere rms, maximum

Voltampere rating 34.7 voltamperes

Secondary voltage (4-6) 6.3 volts ct

Secondary current (4-6) 5.5 amperes rms, maximum

Working voltage (peak)

(1-3) 535 volts

(4-6) 1,070 volts

Design and construction

Dimensions and configuration See figure 1

Duty cycle Continuous

Case Encapsulated

Material Epoxy

Terminals Solder terminal, Malco no 1472 or equivalent

Terminal height 21.9 ± 0.62 inch

Weight 260 grams, maximum

Operating temperature range -55°C to +130°C

Terminal strength MIL-STD-202, method 211, test condition A, 5 pounds

Dielectric withstanding voltage (at sea level)

(1-3). 1,500 volts rms

(4-6) 2,500 volts rms

Electrical characteristics

No load. With 115 volts, 400 Hz across (1-3), current in (1-3) shall not exceed 100 milliamperes and the power in (1-3) shall not exceed 2 watts Voltage across (4-6) 6.74 volts ct, ±5 percent

Rated Load With 115 volts, 400 Hz across (1-3), the voltage across (4-6) shall be 6.3 volts ct, ±5 percent

DC resistance

(1-3) 8.4 ohms, ±20 percent

(4-6) 0.047 ohm, ±20 percent

Polarity. Additive, with terminals 3 and 4 connected

Temperature rise 55°C with 115 volts rms, 400 Hz across (1-3) at an ambient temperature of 75°C

Vibration, high frequency MIL-STD-202, method 204

(A) Quality assurance provisions

Qualification inspection Not applicable for this specification sheet

Quality conformance inspection Groups A and B tests of MIL-T-27 shall be applicable

Marking location See figure 1

Part or Identifying Number (PIN) M27/202-01

CONCLUDING MATERIAL

Custodians

Army - ER

Navy - EC

Air Force - 85

Preparing activity

Army - ER

Agent

DLA - ES

Review activities

Army - MI

Navy - OS, SH

Air Force - 17, 99

DLA - ES

(Project 5950-0815-18)

User activities

Army - AR, ME, WC

Navy - AS, MC

Air Force - 19